

Amendments to the Claims:

1. (currently amended) An apparatus for separating impurities from a liquid by a non-dispersive contacting of a liquid-liquid reactive ~~systems~~ system, said liquids being immiscible with each other, which comprises:

a cylindrical column separated into a first stage and a second stage, a plurality of modules of packed metallic fibers mounted in the first stage of said column on a support, each of said members having said metallic fibres mounted within a tube in said first stage, said tube having a bottom end and a top end, a cap on said top end, the caps provided with orifices designed for a specific flow rate,

a first distributor provided in the first stage of the column for distributing a first liquid located above said support such that said first liquid completely wets said fibers by capillary action and forms a film thereon, said first distributor comprising a plurality of said tubes, each tube having a diameter greater than the holes in said cap, a second distributor fitted at a bottom portion of the second stage for distributing a second liquid containing impurities on to the metallic fibers, said second distributor having a first plurality of holes each of a diameter greater than the diameter of said tubes, and a second plurality of holes being smaller than said first plurality of holes and adjacent the holes of the first plurality of holes and each of said tubes extending between said first and second distributors, the cap end being adjacent the first distributor and a bottom end protruding through the second distributor, wherein said second liquid flows ~~eo currently concurrently~~ with said first liquid so that the impurities present in said second liquid react with said first liquid and dissolve therein; and

a separator connected to a bottom end of said column for receiving said fibers and separating the first liquid and purified second liquid.

2. (original) An apparatus as claimed in claim 1, wherein the first distributor separates the cylindrical column into a first stage and a second stage in addition to distributing the first liquid.

3. (currently amended) An apparatus as claimed in claim 1, wherein said packed metallic fibers are comprised ~~comprises~~ of fine wires packed in a single ~~or multiple~~ tubes at least one tube in order to enable at least one of a mass transfer and ~~for~~ mass transfer with chemical reaction to take place.

4. (currently amended) An apparatus as claimed in claim 1, wherein said modules ~~comprise~~ are comprised of a plurality of tubes held inside a metallic shell, said shell being supported ~~either on~~ by one of said separator ~~or and~~ independently outside of said separator.

5. (Original) An apparatus as claimed in claim 1, wherein the modules are supported in said column at their upper ends.

6. (Original) An apparatus as claimed in claim 1, wherein the modules are suspended from tie rods mounted in said first stage of said column and the metallic fibers are supported and looped around said tie rods.

7. (currently amended) An apparatus as claimed in claim 1, wherein the packed metallic wires have a ~~are packed in the form of~~ sinusoidal wave form so that an inter fiber void space is uniformly maintained.

8. (original) An apparatus as claimed in claim 1, wherein the metallic fibers are chemically treated to enhance wettability.

9. (original) An apparatus as claimed in claim 1, wherein the metallic fibers are made of materials selected from stainless steel, phosphorous bronze, glass fibers and plastic materials.

10. (currently amended) An apparatus as claimed in claim 1, wherein the metallic fibers are of a ~~the~~ thickness of from 0.1 mm to 0.3 mm.

11. (currently amended) An apparatus as claimed in claim 1, wherein the modules of having said metallic fibers ~~comprise~~ are comprised of multiple tubes with having a cap on top ~~in~~ of each tube, said cap caps being provided with an orifice designed for providing a specific flow range.

12. (currently amended) An apparatus as claimed in claim 1, wherein the first distributor is provided with a plurality of holes ~~whose~~ having a diameter is at least equal to or greater than the a diameter of the packed metallic fibers.

13. (currently amended) An apparatus as claimed in claim 1, wherein the second distributor is provided with a first plurality of holes ~~whose having a diameter is at least equal to or greater than the a~~ diameter of the packed metallic fibers and a second plurality of holes of smaller diameter which are placed adjacent to the holes as the first plurality of holes and having a whose diameter is at least equal to or greater than the diameter of the packed metallic fibers.

14. (currently amended) An apparatus as claimed in claim 1, wherein the separator provided at the bottom of the column is ~~optionally~~ provided with at least one heating coils coil.

15. (currently amended) A process for separating impurities from a liquid by non-dispersive contacting of liquid-liquid reactive systems which comprises:

distributing a first liquid over a first distributor stage having a support consisting of with at least one tube of packed metallic fibers mounted in the first distributor stage of a two stage distributor, the tube having bottom and top ends and a cap on the top end with an opening designed for a specific flow range of the first liquid and arranged so that the entire support is completely wetted by said first liquid by capillary action, said first liquid forming a film over said support,

distributing separately by a second distributor stage of the two stage distributor which second stage distributor has larger holes larger than the diameter of said tube and smaller holes adjacent to the larger holes, a second liquid containing impurities to be removed, said second liquid being immiscible with said first liquid and flowing ~~co currently to concurrently with~~ said first liquid so that ~~the~~ dissolved

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impurities in said second liquid react with the film forming formed by said first liquid and dissolve dissolves therein,

providing a separator and extending the tube between the first and second distributor stages whereby allowing the two first and second liquids to flow along the fibers and downward to a the separator, and

collecting the pure second liquid from the separator and if desires, recycling said first liquid.

16. (currently amended) A process as claimed in claim 15, wherein the first liquid is selected from a group consisting of at least one of a caustic solution or amine solution or and both and said second solution is a hydrocarbon stream.

17. (currently amended) A process as claimed in claim 16, wherein the hydrocarbon stream is selected from a group consisting of LPG, gasoline, naphtha, kerosene and diesel.

18. (original) A process as claimed in claim 15, wherein the impurities present in the second liquid are naphthenic acid, hydrogen sulfide, mercaptans and COS.

19. (new) A process as claimed in claim 15 further comprising recycling the first liquid.